

Claims

1. A redundant automation system (1) for controlling a technical device, comprising at least two automation devices (3a, 3b), wherein a first of the automation devices is embodied as the master automation device (3a) and a second of the automation devices is embodied as a standby automation device (3b),
characterized by
- 10 a memory unit (9) assigned to the at least two automation devices (3a, 3b) and in which status data of the automation devices (3a, 3b) can be stored, the memory unit (9) including a common memory area which can be written to and read by the at least two automation devices (3a, 3b), with the result that
- 15 the data present in this memory area is available in parallel to the automation devices (3a, 3b).
2. The redundant automation system (1) as claimed in claim 1, characterized by
- 20 a monitoring module (23) by means of which the operation of the master automation device (3a) can be monitored and if an error occurs in the master automation device (3a) a switchover to the standby automation device (3b) is made possible, said standby automation device (3b) thereupon taking over the
- 25 function of the former master automation device (3a).
3. The redundant automation system (1) as claimed in claim 1 or 2, characterized in that
- 30 there is present in the common memory area status data which describes the current operating status of the technical device and of the automation system (1) immediately prior to the time an error occurs in the master automation device (3a).

4. The redundant automation system (1) as claimed in claim 2 or 3,

characterized in that

5 the switchover takes place in a jolt-free manner in that at least a part of the data residing in the common memory area is immediately processed further by the standby automation device (3b) as the current status image of the technical device and the automation system (1).

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5. A method for operating a redundant automation system (1) for controlling a technical device, comprising at least two automation devices (3a, 3b), wherein a first of the automation devices is operated as the master automation device (3a) and a
15 second of the automation devices is operated as a standby automation device (3b),

characterized in that

status data of the automation devices (3a, 3b) is stored in a memory unit (9) assigned to the at least two automation
20 devices (3a, 3b), wherein a common memory area of the memory unit can be written to and read from by the at least two automation devices (3a, 3b), with the result that the data present in this memory area is available in parallel to the automation devices (3a, 3b).

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6. The method as claimed in claim 5,

characterized in that

the operation of the master automation device (3a) is monitored and if an error occurs in the master automation
30 device (3a) a switchover is made to the standby automation device (3b) which thereupon takes over the function of the former master automation device (3a).

7. The method as claimed in claim 5 or 6,

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characterized in that

there is present in the common memory area status data which describes the current operating status of the technical device and the automation system (1) immediately before the time an

5 error occurs in the master automation device (3a).

8. The method as claimed in claim 6 or 7,

characterized in that

the switchover is performed in a jolt-free manner in that at

10 least a part of the data residing in the common memory area is immediately processed further by the standby automation device (3b) as the current status image of the technical device and the automation system (1).